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January 11, 1996

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
Mail Stop 1170
1919 M Street, N.W., Room 222
Washington, D.C. 20554

Dear Mr. Caton:

Re: *CC Docket No. 94-1*

On behalf of Pacific Bell and Nevada Bell, please find enclosed an original and six copies of their *"Comments of Pacific Bell and Nevada Bell"* in the above proceeding.

Please stamp and return the provided copy to confirm your receipt. Please contact me should you have any questions or require additional information concerning this matter.

Sincerely,

Jay Bennett

Enclosures

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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of	)	
	)	
Price Cap Performance Review	)	CC Docket No. 94-1
for Local Exchange Carriers	)	
	)	

COMMENTS OF PACIFIC BELL AND NEVADA BELL

Pacific Bell and Nevada Bell (the "Pacific Companies") hereby comment on the Fourth Further Notice of Proposed Rulemaking in the above-captioned proceeding.

The Commission should adopt a productivity ("X") factor based on Total Factor Productivity ("TFP"), with no other adjustments. Evidence shows the long-term productivity of the LECs has been approximately 2%. But even this benchmark is one that competition in the local exchange will make increasingly difficult for us to achieve.

We also urge the Commission to eliminate sharing, for reasons we give below.

A. Total Factor Productivity

We strongly endorse the Commission's tentative conclusion, and USTA's recommendation, that TFP be used for the productivity factor. Only TFP meets the Commission's policy goal of a productivity figure that is economically meaningful. Other methods advanced for calculating LEC productivity gains -- such as the "historical revenue method" or a "separated" form of TFP -- are based on economically arbitrary processes such as depreciation and separations rules.

Dr. Laurits Christensen, USTA's consultant, recently testified in California that the TFP differential of the LEC industry compared to the U.S. economy as a whole was 2.1% between 1984-93. The "simplified" method that USTA presents is not intended to be more reliable than Christensen's 1984-93 study, but rather to respond to concerns about the complexity of Christensen's original study and to use publicly available data that can be readily verified. Christensen's original method tracks the methods of an anticipated Bureau of Labor Statistics (BLS) measure of TFP for the LEC industry. Its result -- 2.1% -- is consistent not only with the long-term telephone industry TFP differential (since 1948), but with various other studies of telecommunications industry productivity as well.[1]

There is no reason to think that a five year rolling average, as USTA proposes, produces a result superior to a long-term study. The period on which the X-factor is based must at least be long enough to capture an entire business cycle. In 1990, the Commission reached the same conclusion, saying that short-term studies are less reliable both because they are more influenced by "outlying" data points, and because they cover only one portion of the longer business cycle.[2]

B. The Input Price "Differential"

In Appendix F of the *LEC Price Cap Review Order,* the Commission staff tentatively concluded that since divestiture there had been a shift in the input price differential between the LEC industry and the U.S. economy; that the X-factor should be equal to the difference between TFP for the LEC industry and the economy as a whole (the TFP differential), plus the difference between input price changes for the economy as a whole and the LEC

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[1] *Investigation re Second Triennial Review of Incentive-Based Regulatory Framework for Local Exchange Carriers*, CPUC I.95-05-047, Dr. Christensen (for Pacific Bell) Exh. 1, Att., pp. 11-12 (September 8, 1995).

[2] *Policy and Rules Concerning Rates for Dominant Carriers,* 5 FCC Rcd 6786, para. 97 (1990).

industry (the input price differential); and that such an X-factor for the 1984-1990 period would be "at least 4.8 percent."[3]

The TFP differential should not be adjusted for the "input price differential," for the following reasons.

The X-factor is supposed to represent *achievable gains* in the LEC industry's productivity. Historical productivity data is useful for determining the X-factor only insofar as it has *predictive* value. The Commission has made this clear time and time again. In the *LEC Price Cap Review Order*, the Commission determined an interim X factor based on the "efficiency gains *that LECs reasonably can be expected to achieve.*"[4] "[U]sing actual LEC performance data under price regulation[, w]e no longer have to estimate their *prospective performance* under price caps."[5]

The Commission's appellate counsel agree. For example, describing the origins of the price cap formula in its recent brief in the appeal of the *LEC Price Cap Review Order*, the Commission said that the X-factor was based on historical data because "the historical productivity differential is the best indication of a future productivity differential under rate of return regulation." To this, the Commission explained, it was necessary to add a consumer productivity dividend, because the "historical component ... represented an estimate of what the difference between AT&T productivity changes and national average productivity changes would be in the near future but for the decision to replace rate of return regulation with price cap regulation."[6]

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[3] *Price Cap Performance Review for Local Exchange Carriers*, 10 FCC Rcd 8961 (1995) ("*LEC Price Cap Review Order*"), App. F.

[4] *LEC Price Cap Review Order*, para. 191 (emphasis added).

[5] *Id.*, para. 9 (emphasis added).

[6] Brief of the Federal Communications Commission, Bell Atlantic Tel. Co. v. FCC (D.C. Cir. Nos. 95-1217, et al.), filed October 13, 1995, pp. 6-7 (emphasis in original).

The Courts agree as well. The D.C. Circuit has said that the X-factor represents "*obtainable efficiency gains.*"[7]

For a capital-intensive industry like ours, however, changes in input prices are primarily due to changes in capital costs. *Changes in the cost of capital have no predictive value.* The cost of capital moves randomly: whether interest rates go up or down tomorrow is only randomly correlated with whether they went up or down today. Thus, the long-run change in the cost of capital is zero, just as if a coin is flipped enough times, the ratio of "heads" to "tails" will be 1. Christensen's long-term statistical analyses are consistent with this principle. The longer the period observed (*e.g.*, 1948-92), the closer the input price differential is to zero. NERA also concluded that "there is no evidence that the long-term input price growth rates for the LEC industry and US industry in general are different, and that no difference should be embodied in a value of X intended to present a long-term industry average productivity target." (NERA Report, p. 5.) According to NERA, "The data simply do not show a one-time, permanent change in the relationship between LEC and U.S. input prices in 1984 ... it would be impossible to argue that the mean input prices differential growth rate for the 1984-1990 period would be the best forecast of future input price differential growth rates." (NERA Report, pp. 8-9.) There is no "economically meaningful" way to make an historical input price index accurately predict future changes in the cost of capital.

The danger of imputing predictive value to past changes in capital costs is easily illustrated. An input price adjustment based on the input differential during the post-divestiture period would effectively assume that interest rates will decline almost to zero. As Dr. Christensen testified of the input price differential in the post-divestiture years: "Over the post-

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[7] *National Rural Telecom Ass'n v. FCC*, 988 F.2d 174, 183 (D.C. Cir. 1993).

divestiture period, we had interest rates that have fallen from something on the order of 14 percent down to 7 percent. In order to use that period of forecast forward, we'd have to assume that interest rates were going down from 7 percent to zero in the next few years, and that's just not a reasonable assumption to make."[8] As NERA concluded:

> In summary, a correct reading of the theoretical and empirical evidence in the record supports the fragility of direct measures of the input price differential over the post-divestiture period. Setting X to reflect random fluctuations in the post-divestiture input price differential runs the risk of seriously penalizing price cap regulated firms as interest rates begin to rise and LEC input prices - once again - begin to grow at a faster rate than those of the U.S. as a whole. (NERA Report, p. 13.)

The Commission's Appendix F did not disprove any of this. Appendix F explicitly set out to corroborate "the findings of the recalculated 'Frentrup-Uretsky' study that the X-factor during the period 1984 - 1990 was 5.0 percent."[9] To do so it deliberately rejected standard statistical confidence parameters, *because* they were consistent with a mean of zero for the input price differential.[10] This was classic circular reasoning. According to NERA, Appendix F also misapplied statistical techniques, including testing the wrong hypothesis, using endogenous explanatory variables, and misusing dummy variable techniques. Appendix F also claimed that errors in input price growth are cancelled out by errors in TFP growth. This misunderstands how TFP is calculated. Large errors in input price growth rates lead to small errors in TFP growth because input prices are used in the TFP calculation *not as growth rates* but as levels in calculating the expenditure weights.

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[8] *Investigation re Second Triennial Review of Incentive-Based Regulatory Framework for Local Exchange Carriers*, CPUC I.95-05-047, Dr. Christensen (for Pacific Bell) 2 Tr. 248 (September 27, 1995).

[9] *LEC Price Cap Review Order,* App. F, n.7.

[10] See *id.*, p. 13 and n.50.

It is also clear that making adjustments in the X factor for changes in input prices would cause unnecessary "churn" in our rates. Input price changes are extremely volatile over short periods. It is not a matter of balancing the interests of investors and customers. Price instability benefits no one. It impedes investment, and increases uncertainty for customers.

The Commission cannot suddenly change course, and hold that the purpose of the X-factor is not to predict "achievable gains" but to return *past* gains. The Commission would have to "supply a reasoned analysis indicating that prior policies and standards are being deliberately changed, not casually ignored."[11] No "reasoned analysis" that is consistent with price cap principles can be offered to support an X-factor that simply measures past efficiency gains and refunds them.

C. Competition and the X-Factor

Competition is making it more and more difficult to achieve total factor productivity growth even 2% greater than the economy as a whole.

Competition reduces outputs (that is, our revenues) much faster than it reduces costs, because competitive entry occurs first in markets where marginal costs are low and contribution to total costs is high. Christensen estimated that a one percentage point decrease in total output (revenue) will lead to a reduction in TFP growth of between .3 and .5 percentage points; a one percentage point decrease in intraLATA toll and switched access would lead to a reduction in TFP of about .21 percentage points.[12] Taylor and Taylor estimated that the loss of market share since 1984 reduced AT&T's annual volume growth to about two-thirds of what it

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[11] *Greater Boston Television Corp. v. FCC*, 444 F.2d 841, 852 (D.C. Cir. 1970), *cert. denied*, 403 U.S. 923 (1971). See also *California v. FCC*, 39 F.3d 919, 925 (9th Cir. 1994) (FCC must give "reasoned analysis" for departures from policies).

[12] *Investigation re Second Triennial Review of Incentive-Based Regulatory Framework for Local Exhange Carriers*, CPUC I.95-05-047, Dr. Christensen (for Pacific Bell) Exh. 1, Att., pp. 12-15 (September 8, 1995).

would have been without the loss in share.[13] This example, however, understates what the effect of competition will be on our output. The reason is that AT&T lost market share, but its operating profits remained about the same -- it lost no margin.[14]

In competitive markets, automatic productivity reductions are simply unnecessary, because competition provides the necessary price discipline. Yet current rules require the X-factor be applied uniformly to competitive and non-competitive services alike. For LECs subject to even a limited amount of competitive entry, the perverse effects of such automatic, compounding productivity reductions are doubly crippling. They reduce price flexibility in competitive markets. And they reduce rates in noncompetitive markets where contribution to total costs is low or even nonexistent. In these low- (or no-) margin markets they prevent needed rate rebalancing and artificially deter competitive entry.

We are more subject to this whipsawing effect than any other LEC. California is characterized by: (1) A few highly competitive metropolitan areas, where the number of collocation arrangements far exceeds the number for any other state -- indeed, comprise not far from half the nation's total. We have tariffed a total of 86 wire centers for collocation. These offices (12 percent of Pacific's wire centers) account for 45 percent of total switched access minutes, 74 percent of DS1s and 88 percent of DS3s. (2) Vast low-density areas -- perhaps two-thirds of our wire centers -- from which, as a whole, we derive little or no contribution to total costs. (3) Statewide basic service prices that are relatively low, *i.e.*, highly subsidized in low-density areas. And (4) a very high proportion of contribution from intraLATA toll services. IntraLATA toll is now subject to competition and fast being eroded. Yet no substantive changes

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[13] William E. Taylor and Lester Taylor, "Postdivestiture Long-Distance Competition in the United States," American Economic Review, vol. 83 (1993), pp. 185-90.

[14] See Affidavit of Paul W. MacAvoy, United States v. Western Electric Co., Cir. No. 82-0192 (Dist. Ct. D.C.).

have been made to universal service obligations or transfers at either the state or federal level. (We receive no funding from the Universal Service Fund.)

The five year "rolling average" (with a two-year lag) that USTA proposes -- while it may have merit for LECs subject to far less competition than we are -- is grossly insufficient to address the reduction in actual productivity that we will face. The industrywide TFP will be biased toward companies that face far less competition than we do. Competition does not stand still, let alone wait seven years for a response. Nor is it sufficient to require us to experience "significantly declining demand for a sustained period of time," which suggests waiting until the death spiral is underway. Indeed, it would be difficult to square this standard with *Hope*, *Duquesne*, and other decisions on confiscatory regulation.

D. *Multiple X-Factors*

The Commission has requested comment on whether there should be more than one X-factor. We oppose any X-factor option that is tied to reducing alleged "barriers to entry," because at least in California there no longer are any. Such an approach would also fail to consider the considerable competition that *already* exists and its effect on our ability to achieve even 2% annual improvements in productivity. Indeed, as Prof. Daniel F. Spulber demonstrated in a recent article, the competitive entry that has already occurred moots the whole issue of entry barriers. Spulber points out there are two main types of barriers to entry: sunk costs and government regulation.[15] Neither type of barrier, Spulber demonstrates, exists in local telecommunications markets. Among other reasons, "the argument that sunk costs constitute a substantial barrier to entry into the local exchange is also rendered invalid by *the substantial entry into local telecommunications that has already occurred* ... by long-distance companies,

[15] Daniel F. Spulber, "Deregulating Telecommunications," *Yale Journal on Regulation,* vol. 12, no. 25 (1995).

dozens of competitive access providers, cable companies, cellular companies, and other wireless transmission suppliers.... After their irreversible investments have been made, entrants become incumbents. From that point forward, the costs of entry cannot be used to distinguish RBOCs from new communications providers."[16]

Government regulation also is no longer a barrier to entry in the local exchange. Instead, it is a burden that we alone bear. Competition for every telecommunications service will be legal in California on January 1, 1996. We will be required to resell dialtone to competitors by March 1, 1996. We have also reached an historic agreement with MFS to provide it with unbundled loops. This agreement has been submitted to the CPUC for approval in the near future, and we hope that it will become the template for other competitors to buy our unbundled loops. The MFS agreement also resolves compensation arrangements and number portability. Intrastate collocation has already been provided for. The CPUC is currently processing sixty-six applications for local operating authority. There *are* legal barriers to entry in the telecommunications business -- but they protect only our competitors in the long-distance telephone and cable industries.

E. ***Sharing***

We agree with USTA's "unequivocal position that sharing has no place in any LEC price cap plan." First, sharing dampens incentives to operate more efficiently. Second, sharing discourages new deployment of infrastructure and technology. By capping overall returns, and not just prices, sharing handicaps the LECs' ability to attract the tremendous sums of capital that rewiring America will require. Third, sharing increases administrative burdens on carriers and the Commission. Its elimination would free the Commission from having to

[16] *Id.*, pp. 49-50.

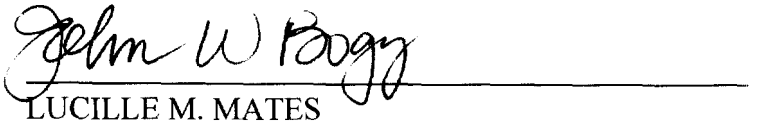
micromanage a complex and often politically motivated system of cost allocations. Fourth, the measurement of interstate earnings, which result from subjective and sometimes arbitrary judgments about separations and depreciation rules, is increasingly devoid of economic meaning. Fifth, eliminating sharing would help facilitate the removal of services from regulation as markets become fully competitive.

F. ***Conclusion***

For the foregoing reasons, the Commission should adopt an X-Factor based on long-term TFP, with no other adjustment. Sharing should be eliminated.

Respectfully submitted,

PACIFIC BELL
NEVADA BELL



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